# UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

UNITED STATES OF AMERICA, and STATE OF ILLINOIS,	)	
Plaintiffs,	)	No. 11 C 8859
v.	)	NO. 11 C 0039
	)	Judge George M. Marovich
METROPOLITAN WATER	)	
RECLAMATION DISTRICT OF	)	
GREATER CHICAGO,	)	
Defendant.	)	

## **MEMORANDUM OPINION AND ORDER**

On the same day that the United States of America ("US" or the "government") and the State of Illinois ("Illinois") filed suit against the Metropolitan Water Reclamation District of Greater Chicago ("MWRD") for alleged violations of the Clean Water Act, the plaintiffs filed a proposed consent decree. After the deadline for public comment had passed and after the governments considered the public comments, the plaintiffs filed a motion for entry of the consent decree. Defendant MWRD also supports entry of the consent decree. Two sets of intervenors [(1) the "Alliance Group," which consists of the Alliance for the Great Lakes and the Environmental Law & Policy Center and (2) the "NRDC Group," which consists of the Natural Resources Defense Council, Sierra Club and Prairie Rivers Network] oppose entry of the consent decree. The parties have filed voluminous briefs and reams of exhibits, including deposition transcripts. The Court has held oral argument. For the reasons set forth below, the Court approves the consent decree.

# I. Background

In most parts of the country, municipalities use separate sewer systems--one for storm water, one for sanitary waste water--to convey different types of waste water to treatment plants. The City of Chicago is different. Here, sanitary waste water, storm water and industrial waste water are all conveyed via one sewer system (a "combined sewer system") to sewage treatment plants where the water is treated (in theory, anyway) before being released into a water body.

A problem that a combined sewer system can face is insufficient capacity. Even if a combined sewer system has sufficient capacity to convey waste water in dry weather or during rain storms with an average amount of precipitation, it may not have sufficient capacity to convey waste water in the event of above-average precipitation. The water, however, must go somewhere. If it cannot flow into the sewers, it will remain on the streets and sidewalks or back up into basements, neither of which is desirable. Accordingly, combined sewer systems are designed to overflow (a process that is called "combined sewer overflow" or "CSO"). The combined sewer systems are designed to overflow at points along water bodies (called "CSO outfalls") so that the water has a place to go other than basements and streets.

Defendant Metropolitan Water Reclamation District of Greater Chicago ("MWRD") is the entity responsible for operating the waste water sewer system and the seven treatment plants that serve Chicago and the surrounding areas. MWRD serves an area of approximately 883 square miles, including the City of Chicago and 128 surrounding municipalities. A portion of that area uses combined sewer systems. For example, MWRD's three largest water treatment plants—the North Side water reclamation plant, the Calumet water reclamation plant and the Stickney water reclamation plant—receive water from combined sewer systems. (This case

involves only those three plants.) These combined sewers lead to CSO outfalls where, during periods of time in which the combination of storm water and sanitary waste exceeds capacity, CSOs occur.¹ MWRD's CSO outfalls are located such that they release water into canals, channels, creeks or rivers ("Chicago Area Waterways"). None of MWRD's CSO outfalls discharge directly into Lake Michigan. Sometimes, however, the water levels in the Chicago Area Waterways become too high (which threatens flooding), so the gates between the Chicago River and Lake Michigan and/or the gates between the Calumet River and Lake Michigan are opened and water backflows into Lake Michigan. That happens, on average, once per year.

# The history of the tunnel and reservoir plan

The capacity problem associated with combined sewer systems, which was exacerbated by post-World War II development, is not recent news to the City of Chicago. In the late 1960's, officials from the City of Chicago, together with officials from Cook County, the State of Illinois and the Metropolitan Sanitary District of Greater Chicago (as MWRD was then known) formed a Flood Control Coordinating Committee to study options for ameliorating flooding and the waste water discharge problems caused by the combined sewer system. The committee considered 23 alternatives and ultimately, in December 1972, recommended a system of tunnels and reservoirs that is now known as the Tunnel and Reservoir Plan ("TARP").

TARP is a system of tunnels and reservoirs that are designed to capture and store the combined sewer flow so that it is not released as CSOs at CSO outfalls. The idea is that when an excess quantity of combined sewer waste (excess in that it is greater than the capacity of the

<sup>&</sup>lt;sup>1</sup>For example, CSOs occurred 21 times in MWRD's service area during the first six months of 2013.

water reclamation plants) flows into the system, it flows into tunnels that lead to reservoirs that can store the excess flow until the water reclamation plants have capacity to treat the waste water. Once the nearby water reclamation plant has available capacity, the waste water is pumped from the reservoir to the water reclamation plant, where the waste water can be treated and safely released.

TARP includes 109.4 miles of tunnels in four separate systems: the Upper Des Plaines tunnel system, the Mainstream tunnel system, the Lower Des Plaines tunnel system and the Calumet tunnel system. Each tunnel system, in turn, leads (or will one day lead) to one of three reservoirs: the Gloria Majewski Reservoir ("Majewski"), the Thornton Composite Reservoir or the McCook Reservoir. These components of TARP are in various stages of completion.

The Upper Des Plaines tunnel system, which consists of 6.6 miles of tunnels with the capacity to store 71,000,000 gallons of waste water, is complete. That tunnel system leads to the Majewski Reservoir, which was completed in 1998. The Majewski Reservoir has the capacity to store 350,000,000 gallons of waste water.

The Mainstream tunnel system (which consists of 40.5 miles of tunnels that were finished in 1998) and the Lower Des Plaines tunnel system (which consists of 25.6 miles of tunnels that were completed in 2001) lead to the Stickney water reclamation plant. The tunnels, themselves, have combined storage capacity of 1,605,000,000 gallons. Ultimately, the Mainstream tunnels and the Lower Des Plaines tunnels will connect to the McCook Reservoir. The McCook Reservoir is not finished; but, when it is, it will have capacity to store 10,000,000,000 gallons of waste water until the water can be treated.

Finally, the Calumet tunnel system (which consists of 36.7 miles of tunnels that were finished in 2006) leads to the Calumet water reclamation plant. The tunnels, themselves, have storage capacity of 630,000,000 gallons. Ultimately, the tunnels will connect to the Thornton Composite Reservoir, where waste water can be stored until it can be pumped into the Calumet water reclamation plant for treatment. The Thornton Composite Reservoir is not finished; but, when it is, it will have the capacity to store 4,800,000,000 gallons of waste water.

Construction of the various TARP components began in 1975. Thus far, construction has cost more than \$3,000,000,000.000. Of that, MWRD has spent approximately \$1,400,000,000.000. The rest of the money came from EPA construction grants and the Army Corps of Engineers.

It will be some time before the Thornton Reservoir and the McCook Reservoir are completed. Currently, the MWRD is having limestone mined from the sites to create rough holes, within which MWRD will construct the reservoirs. In the meantime, according to the complaint filed by the government, the MWRD continues to discharge CSOs in violation of its permits.

### The governments' complaint

The Clean Water Act ("CWA") prohibits the "discharge of any pollutant" *except* in a manner that complies with provisions of the CWA. 33 U.S.C. § 1311(a). One of those exceptions is a discharge of pollutants in navigable waters in compliance with a permit issued under §402 of the Clean Water Act, 33 U.S.C. § 1342. That section "established the National Pollutant Discharge Elimination System ('NPDES'), and requires dischargers to obtain a permit from the Environmental Protection Agency or an authorized state." *Texas Ind. Prod. & Royalty Owners Assoc. v. EPA*, 410 F.3d 964, 967 (7th Cir. 2005) (citing 33 U.S.C. § 1342(a)(1), (b)).

MWRD holds an NPDES permit (the "Calumet Permit") for its Calumet water reclamation plant, one (the "North Side Permit") for its North Side water reclamation plant and one (the "Stickney Permit") for its Stickney water reclamation plant. Each of these NPDES permits was issued on January 22, 2002 and took effect on March 1, 2002. The permits state that they expire on February 28, 2007, but the parties agree that the permits are still in effect, pursuant to Illinois law (5 ILCS 100/10-65(b)), until IEPA's final decision on new permits.

The Calumet Permit authorizes MWRD to discharge from 13 specified CSO outfalls, provided that MWRD meets certain terms and conditions. (Calumet Permit at 8-9). Similarly, the Stickney Permit authorizes MWRD to discharge from 15 specified CSO outfalls and the North Side Permit authorizes MWRD to discharge from 9 specified CSO outfalls, provided that it meets certain terms and conditions. (Stickney Permit at 8-9; North Side Permit at 9).

This case began when the United States and the State of Illinois filed a complaint alleging that MWRD had violated these three permits. In Count I (which plaintiffs label "Dissolved Oxygen"), plaintiffs allege that MWRD violated the terms of the Stickney Permit, the Calumet Permit and the North Side Permit with respect to dissolved oxygen. The Stickney Permit, the Calumet Permit and the North Side Permit authorize CSO discharges, but the discharges must "be treated . . . to prevent depression of oxygen levels below the applicable water quality standard." (North Side Permit at 9; Calumet Permit at 9; Stickney Permit at 9). In Count II (which plaintiffs label "Floatables"), plaintiffs allege that MWRD violated the terms of the Stickney Permit, the Calumet Permit and the North Side Permit by failing to treat the CSOs in a manner that would prevent the accumulation of sludge deposits, floating debris and solids. Those permits authorize CSO discharges, but the discharges must "be treated . . . to the extent

necessary to prevent accumulations of sludge deposits, floating debris and solids . . ." (North Side Permit at 9; Calumet Permit at 9; Stickney Permit at 9).

Count III (which plaintiffs label "Permit Condition 10.1"), too, involves alleged violations of these three permits. The Stickney Permit, the North Side Permit and the Calumet Permit each states, as a condition of the authorization of the CSOs:

All combined sewer overflows and treatment plant bypasses shall be given sufficient treatment to prevent pollution and the violation of applicable water quality standards. Sufficient treatment shall consist of the following:

All dry weather flows and the first flush of storm flows shall be transported to the main STP and shall meet all applicable effluent standards and the effluent limitations required from the main STP outfall. Additional flows, but not less than ten times the average dry weather flow for the design year, shall receive the equivalent of primary treatment and disinfection with adequate retention time.

(Special Condition 10.1/Calumet Permit at 9; Stickney Permit at 9; North Side Permit at 9). In Count III, the plaintiffs allege that MWRD violated Special Condition 10.1 of each permit by failing to provide treatment to and disinfection of a sufficient quantity of flows.

## The proposed consent decree

The plaintiffs and the defendant have reached an agreement to settle this case with the entry of a proposed consent decree. The proposed consent decree outlines a number of obligations and projects MWRD has agreed to undertake.

### Fine

First, MWRD has agreed to pay a penalty to both plaintiffs. If the consent decree is approved and entered by this Court, MWRD will pay the United States Department of Justice \$350,000.00. MWRD will pay the State of Illinois \$325,000.00. Thus, MWRD will pay a combined civil penalty of \$675,000.00.

#### TARP deadlines

Next, the proposed consent decree sets out the deadlines by which MWRD must complete TARP's final stages, which are the Thornton Composite Reservoir and the McCook Reservoir. Under the terms of the proposed consent decree, MWRD is to complete the mining for the Thornton Composite Reservoir by December 31, 2013. Before the Thornton Reservoir can become operational, MWRD must complete certain other projects. Those projects must be completed by December 31, 2015, and the Thornton Composite Reservoir must be operational by December 31, 2015.

The McCook Reservoir will be completed in two stages. MWRD is to complete the mining of Stage One (which will have capacity to store 3,500,000,000 gallons of water) by December 31, 2016 and have Stage One operational by December 31, 2017. As for Stage Two (which will have capacity to store 6,500,000,000 gallons of water), MWRD is to have the mining completed by December 31, 2028. The consent decree requires MWRD to have Stage Two of the McCook Reservoir operational by December 31, 2029.

MWRD has contracted with third parties to mine the limestone from the sites that will become the Thornton Composite Reservoir and the McCook Reservoir. Because third parties are doing the mining, it is possible that events beyond the control of MWRD could cause delays of the mining and that those delays could cause the MWRD to miss one or more of the deadlines (for completing the Thornton Composite Reservoir or the McCook Reservoir) set out in the consent decree. The consent decree calls any excavation delay beyond the deadlines in the consent decree a "contingency event" and sets out a process for how the parties to the consent decree would handle such an event, should it occur.

Apart from contingency events, the consent decree sets penalties that will be assessed if MWRD fails to meet the deadlines for operation of the Thornton Composite Reservoir and/or the McCook Reservoir. Those penalties are \$1,000.00 per day for the first through 30th day; \$2,000.00 per day for the next 30 days; and \$5,000.00 per day for each subsequent day.

# Post-construction performance

The consent decree sets out operational standards that will apply to the two reservoirs (and their respective tunnel system(s)) after the reservoirs are operational.

For example, once the Thornton Composite Reservoir is operational, the Calumet water reclamation plant is required to provide full treatment to the Maximum Practical Flow (which the consent decree defines as "the maximum flow accounting for all hydraulic and hydrologic factors that can pass through the Calumet WRP, North Side WRP or Stickney WRP within the then existing capacity constraints of the applicable WRP and receive full treatment in compliance with the NPDES Permit(s) for the WRP(s) receiving the flow."). (Consent Decree at 10). The consent decree also requires that all flows that enter the Calumet TARP tunnels be conveyed to the Calumet water reclamation plant and be treated before being released (although the consent decree allows CSOs at one particular CSO outfall if the Cal Sag Tunnel is full). The consent decree sets out the same standards for the Mainstream/Lower Des Plaines Tunnels and the McCook Reservoir once it becomes operational (with exceptions allowing for CSOs at three particular CSO outfalls should particular tunnels be full).

# **Monitoring**

The consent decree also requires MWRD to develop a plan for post-construction monitoring of TARP. Within one year after the entry of the consent decree, MWRD must

develop and provide to EPA and IEPA (for their approval) a plan for monitoring CSO discharges in the Calumet tunnel and reservoir system (the system that leads to the Thornton Composite Reservoir). Among other things, the monitoring must determine whether MWRD's CSOs are in compliance with the Calumet NPDES Permit in effect at the time. Within five years after the entry of the consent decree, MWRD must develop and provide to EPA and IEPA (for their approval) a plan for monitoring CSO discharges in the Mainstream and Lower Des Plaines tunnel and reservoir systems (i.e., the systems that lead to the McCook Reservoir). The monitoring must determine whether MWRD's CSOs are in compliance with the North Side and Stickney NPDES Permits in effect at the time.

If, once TARP is finished and the monitoring program is in effect, MWRD's CSOs are not in compliance with the relevant permits, then MWRD must do more. Specifically, MWRD is required, under the terms of the proposed consent decree, to submit to EPA and IEPA a plan in which MWRD analyzes alternatives for bringing the CSOs into compliance with the permits.

MWRD must also inform EPA and IEPA which of the alternatives it will undertake and the time frame in which it will complete the alternatives.

#### **Floatables**

Next, the consent decree requires MWRD to implement a "floatables control" program within 30 days after the entry of the consent decree. Floatables include such things as street litter (which can be swept into the sewers during rain storms) and sanitary items (which are flushed into toilets). The purpose of the floatables control plan is to capture those materials if they are released during a CSO.

The floatables plan first requires MWRD to continue what it currently does with respect to floatables. Currently, MWRD uses two pontoon boats to collect floatables. The pontoons patrol Chicago Area Waterways during six months (mid-April through mid-October) of the year. The consent decree requires MWRD to continue these operations (although it is allowed to use different boats). It also requires MWRD to purchase two skimmer boats, which are boats specifically designed to capture floatables and litter from water.

In addition, the consent decree requires MWRD to engage in "response activities" after a CSO. Specifically, within 24 hours after a CSO, MWRD must dispatch boats (including the two new skimmer boats) to affected areas. The boats are required to collect floatables at a specific list of "hot spots," i.e., places where floatables have been found regularly in the past. These response activities will occur year-round, "unless these waterborne operations are unsafe or infeasible for reasons including but not limited to the presence of fog, ice, equipment icing, wind or limited visibility." (Consent Decree Appendix B at 1).

Finally, the floatables control plan requires MWRD to install a containment boom at one particular CSO outfall.

### Green infrastructure

The consent decree also requires MWRD to implement what the parties call a "green infrastructure" program. The goal of the program is to reduce the amount of storm water that flows into the sewer system after a storm. As used in the consent decree, "green infrastructure" includes: items (such as rain barrels) that capture the water for reuse; green rooftops; permeable pavement; special landscaping; and other means of absorbing rain water so that it does not flow into a sewer.

The green infrastructure program set out in the consent decree has a number of specific deadlines MWRD must meet. Among the deadlines is a requirement that MWRD distribute 15,000 low-or-no-cost rain barrels within five years (10,000 of which rain barrels must be distributed within three years). The maximum combined capacity of those rain barrels is 825,000 gallons. In addition to the rain barrels, MWRD is required to have implemented sufficient green infrastructure projects to retain (per storm) 2,000,000 gallons of water within five years, 5,000,000 gallons within ten years and 10,000,000 gallons within fifteen years.

The consent decree requires additional green infrastructure projects to be implemented in the event MWRD has to report a contingency event (i.e., a delay in mining that is caused by something out of MWRD's control). As penalty for reporting a contingency event that delays mining at Thornton Composite Reservoir or Stage One of the McCook Reservoir, MWRD is required to implement green infrastructure projects that retain an additional 250,000 gallons of water. For every contingency event that delays Stage Two of the McCook Reservoir, MWRD is required to implement projects that retain an additional 250,000 gallons of water.

## Termination of consent decree

Finally, the consent decree sets out the criteria for terminating the consent decree.

Different parts of the consent decree (according to its terms) can by terminated at different times.

For example, the portions related to the Thornton Composite Reservoir can be terminated once

MWRD has complied with the post-construction performance standards for one year and has

completed the post-construction monitoring plan. The portions that relate to the McCook

Reservoir can be terminated once MWRD has complied with the post-construction performance

standards for one year and has completed the post-construction monitoring plan. In the meantime, the Court would retain jurisdiction to enforce the terms of the consent decree.

#### **Intervenors**

The intervenors oppose the consent decree. The intervenors are groups made up of concerned citizens who use the waterways and Lake Michigan for kayaking and sailing and/or the areas adjacent to the waterways for hiking or biking. Among the members of the intervenors are: an individual who has gotten sick after her kayak capsized in the Chicago River; individuals who smelled raw sewage in waterways; and individuals who have seen raw sewage and dead rats in waterways. Not surprisingly, the intervenors and their members want the waterways kept free from untreated wastewater.

The Court appreciates the intervenors' efforts in looking out for the interests of those members of the public who use the waterways for recreation.

### II. Discussion

Before signing a consent decree, the Court must satisfy itself that the decree is reasonable. *Donovan v. Robbins*, 752 F.2d 1170, 1177 (7th Cir. 1985). In *Donovan*, the Seventh Circuit explained:

A federal judge has the full powers of an equity judge. So if third parties complain to him that the decree will be inequitable because it will harm them unjustly, he cannot just brush their complaints aside. Even if no third party complains, the judge has to consider whether the decree he is being asked to sign is lawful and reasonable, as every judicial act must be.

\* \* \*

Although a judge thus must, before signing an equity decree that either affects third parties or imposes continuing duties on him, satisfy himself that the decree is reasonable ('fair, reasonable and adequate,' in the usual formulation, but we think 'reasonable' sums it up fairly and adequately) how deeply the judge must inquire, what factors he must take into account, and what weight he should give the settling parties' desires will vary with the circumstances. The flexible

character of the decision makes generalization difficult; but it is safe to suggest that the limitations of judicial competence and the desirability of encouraging out-of-court settlements in order to lighten the judicial caseload create a presumption in favor of approving the settlement.

*Donovan*, 752 F.2d at 1177 (internal citations omitted).<sup>2</sup> A consent decree is the product of parties' agreement to settle, but the Court's right to approve or reject that settlement "does not authorize the court to require the parties to accept a settlement to which they have not agreed." *See Evans v. Jeff D.*, 475 U.S. 717, 726 (1985). The Court will either approve the consent decree as reasonable or reject the consent decree as unreasonable. It will not revise the consent decree that the parties have negotiated.

## We are not building a separate sewer system.

Let us begin with what no one is suggesting. No one is suggesting that the MWRD be required to build a separate sewer system for storm water. The option was considered and quickly rejected in 1972, when the Flood Control Coordinating Committee recommended TARP. The Flood Control Coordinating Committee dropped the idea of separate storm sewers, because

<sup>&</sup>lt;sup>2</sup>The parties debate the degree to which the Court should defer to the expertise of the EPA. Although there is certainly support for the premise that a court should defer to the expertise of an agency [*United States v. George A. Whiting Paper Co.*, 644 F.3d 368, 372 (7th Cir. 2011) ("First, the trial court must defer to the expertise of the agency *and to the federal policy encouraging settlement.*") (emphasis added), which cites *In re Tutu Water Wells CERCLA Lit'n*, 326 F.3d 201, 207 (3d Cir. 2003), which cites *United States v. Cannons Engineering Corp.*, 899 F.2d 79, 90 (1st Cir. 1990), which cites *Federal Trade Comm'n v. Standard Fin. Mgt. Corp.*, 830 F.2d 404, 408 (1st Cir. 1987)], if one follows the line of authority toward its origin, one finds the same standard as applies to all consent decrees. *See Federal Trade Comm'n v. Standard Fin. Mgt. Corp.*, 830 F.2d 404, 408 (1st Cir. 1987) ("When a public agency requests that a judicial stamp of approval be placed on a negotiated consent decree, the court has the duty to approve the decree unless it is 'unfair, inadequate or unreasonable.'"). This Court agrees that "the true measure of the deference due depends on the persuasive power of the agency's proposal and rationale, given whatever practical considerations may impinge and the full panoply of the attendant circumstances." *Standard Fin. Mgt.*, 830 F.2d at 408.

of the massive cost (estimated, then, at more than \$4,000,000,000.00, which would be more than \$22,000,000,000.00 today) and the massive disruption to the public streets. The biggest problem, though, was that a separate storm sewer system would have provided no flood control. Neither the original parties nor the intervenors take issue with the decision not to construct a separate sewer system.

### We are not starting over.

Nor are we reconsidering the merits of TARP. For the most part, the intervenors take TARP as a given. *See* NRDC Brief at 3 ("NRDC Group does not take the position that TARP should be scrapped and the parties should go back to the drawing board. After 40 years of TARP implementation, it is too late for that."). Still, the NRDC Group wants a do-over with respect to two aspects of TARP. First, the NRDC Group asks the Court "not to enter the [consent decree] until and unless the Governments comply with CSO Control Policy planning requirements." (NRDC Brief at 43-44). Second, the NRDC complains that TARP does not comply with the CSO Control Policy's "Presumption Approach."

The CSO Control Policy (whose planning requirements NRDC now wants the Court to enforce against MWRD) was published in the Federal Register in April 1994, long after MWRD began implementing TARP. Congress essentially codified it in 2000. 33 U.S.C. § 1342(q)(1) ("Each permit, order, or decree issued pursuant to this chapter after the date of enactment of this subsection for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy signed by the Administrator on April 11, 1994 (in this subsection referred to as the 'CSO Control Policy')."). According to its own terms, the CSO Control Policy:

represents a comprehensive national strategy to ensure that municipalities, permitting authorities, water quality standards authorities and the public engage in a comprehensive and coordinated planning effort to achieve cost-effective CSO controls that ultimately meet the appropriate health and environmental objectives and requirements.

59 Fed.Reg. 18,689 (April 19, 1994). The CSO Control Policy explicitly recognized that, as of the time it was issued, some municipalities had already begun projects for the long-term control of CSOs. Therefore, the CSO Policy provided:

[P]ortions of this Policy may not apply, as determined by the permitting authority on a case-by-case basis, under the following circumstances:

\* \* \*

2. Any permittee that, on the date of publication of this final Policy, has substantially developed or is implementing a CSO control program pursuant to an existing permit or enforcement order, and such program is considered by the NPDES permitting authority to be adequate to meet [water quality standards] and protect designated uses and is reasonably equivalent to the treatment objectives of this Policy, should complete those facilities without further planning activities otherwise expected by the Policy. Such programs, however, should be reviewed and modified to be consistent with the sensitive area, financial capability, and post-construction monitoring provisions of this Policy.

CSO Control Policy at I.C.2, 59 Fed.Reg. 18,690 (emphasis added). Thus, the CSO Control Policy allows a permitting authority to exempt a permittee from the CSO Control Policy's planning requirements. IEPA (the permitting authority for MWRD) did just that via a 1995 letter and in the 2002 NPDES Permits (i.e., the Calumet Permit, the Stickney Permit and the North Side Permit) at issue in this case. (More on that below.)

NRDC's second problem with TARP is that NRDC does not believe TARP should have been approved under the "Presumption Approach." The CSO Control Policy makes "[p]ermittees with CSOs" responsible "for developing and implementing long-term CSO control plans that will ultimately result in compliance with the requirements of the [Clean Water Act]." 59 Fed.Reg. 18691. The CSO Policy states that "the long-term CSO control plan should adopt

one of the following approaches:" the Presumption Approach or the Demonstration Approach. CSO Control Policy at II.C.4, 59 Fed.Reg. 18692. As to the Presumption Approach, the CSO Control Policy states:

A program that meets any of the criteria listed below would be presumed to provide an adequate level of control to meet the water quality-based requirements of the CWA, provided the permitting authority determines that such presumption is reasonable in light of the data and analysis conducted in the characterization, monitoring, and modeling of the system and the consideration of sensitive areas described above. These criteria are provided because data and modeling of wet weather events often do not give a clear picture of the level of CSO controls necessary to protect [water quality standards].

CSO Control Policy II.C.4.a., 59 Fed.Reg. 18692-93 (emphasis added). Thus, the CSO Control Policy allows the permitting authority (here, IEPA) to determine whether the Presumption Approach applies. The IEPA did so in a 1995 letter and in the 2002 NPDES Permits at issue in this case.

Specifically, on June 28, 1995, the IEPA sent a letter to the MWRD. In the letter, IEPA stated, in relevant part:

[T]he Agency agrees with the District that the *Tunnel and Reservoir Project* (*TARP*) meets the objectives of the 'Presumptive Approach' as described in the federal CSO Control Policy (published in the *Federal Register* on April 19, 1994). Furthermore, the Agency believes that the completion of TARP will be adequate to meet water quality standards and protect the designated uses of the receiving waters pursuant to Section I.C. (titled 'Effect on Current CSO Control Efforts') of the federal CSO Control Policy. This section *specifically exempts the District from planning requirements* otherwise expected under the federal policy. Verification of compliance with water quality standards will still be required when TARP is completed.

(EPA/MWRD Responsiveness Summary Exhibit 33) (emphasis added). Thus, the IEPA determined (and informed MWRD) that: (1) TARP meets the objectives of the Presumption Approach; and (2) MWRD was exempt from the CSO Control Policy's planning activities.

IEPA's determinations were also explicitly stated in the three NPDES permits at issue in this case, each of which permits was issued on January 22, 2002 and made effective March 1, 2002. The Stickney Permit, the North Side Permit and the Calumet Permit say, in relevant part:

In 1995, *IEPA confirmed that TARP met the 'presumption' approach* requirements of the 1994 CSO Policy. IEPA and USEPA have determined, consistent with Section 1.C.2. of the CSO Policy, that *the completion of TARP without further planning* would fulfill the obligations of the CSO Policy, since it is believed that upon completion of the reservoirs, CSOs will no longer cause or contribute to violations of water quality standards or use impairment.

(Stickney NPDES Permit at 16; North Side NPDES Permit at 16; Calumet NPDES Permit at 16) (emphasis added).

Notwithstanding these facts, the NRDC Group (a) wants MWRD to engage in planning activities and (b) questions whether TARP satisfies the Presumption Approach. Intervenors do not explain why they have a private right of action to challenge IEPA's determinations with respect to planning activities and the Presumption Approach. Nor do they explain why this Court would have jurisdiction to hear such a challenge. Perhaps, long ago (when the permits were issued), the intervenors had the right to make such a challenge, but they never had the right to make such a challenge in a United States District Court. 415 ILCS 5/40(e)(1) ("If the Agency grants or denies a[n NPDES permit], a third party, other than the permit applicant or Agency, may petition the Board within 35 days from the date of issuance of the Agency's decision, for a hearing to contest the decision of the Agency"); 415 ILCS 5/41(a) (allowing judicial review of the Board's decision within 35 days) & 5/41(c) (prohibiting review of a permit in an enforcement proceeding); 33 U.S.C. § 1369(b)(1)(F) (allowing judicial review of an EPA decision granting or denying a permit in the Circuit Court of Appeals within 120 days of the decision) & 1369(b)(2) (prohibiting review of such decisions in enforcement actions). This

Court will not hear intervenors' challenge to the IEPA's determinations that TARP meets the Presumption Approach requirements and requires no further planning.

### We are considering whether the consent decree is reasonable.

The question for this Court is not whether TARP was the right choice or even a good choice, but whether this consent decree is reasonable. In considering the consent decree, the Court will consider whether it is in the public's best interest. On that front, the Court notes that the public has more than one interest. The Court agrees with intervenors that the public has an interest in keeping its waterways free from sludge, floating debris, feces and other waste. Those things are, in a word, disgusting. Some members of the public (including the intervenors) have a greater interest (than has the general public) in keeping the waterways clean, because they use the waterways for recreation. The public, however, includes more than just the people who sail on Lake Michigan or kayak in the Chicago River. The public includes the people who walk on the sidewalks and drive/bike on the streets and, therefore, have an interest in keeping sidewalks and streets free of water during storms. The public includes businesses and homeowners with basements, all of whom have an interest in keeping waste water out of their property. The public also includes the taxpayers who pay for the sewer system and TARP and, therefore, have an interest in this project's being completed at a reasonable cost. The Court will consider all of these interests, including (but not limited to) the interests of the intervenors, when evaluating the reasonableness of the proposed consent decree.

The intervenors point out a number of respects in which they think the consent decree is unreasonable, and the Court will now consider those in turn.

# **Duration**

The Alliance Group objects to the duration of the consent decree. The Alliance Group believes that the consent decree is unreasonable, because it allows MWRD too much time to complete TARP.

A public-works project that takes decades to complete is not inherently unreasonable. In a world of on-demand movies and text messages, it might seem unreasonable to wait until 2029 for the completion of TARP, but the project is huge and, like Rome, cannot be built in a day. Other courts have approved similarly-long time frames for the completion of these types of public-works projects. See United States v. City of Welch, WV, Case No. 1:11-00647, 2012 WL 385489 (S.D.W.V. Feb. 6, 2012) (approving consent decree with respect to long term control plan for CSOs that will take until December 31, 2027 to complete); *United States v. City of* Evansville, IN, Case No. 3:09-cv-128, 2011 WL 2470670 (S.D.Ind. June 20, 2011) (approving consent decree with respect to overflow control plan that will take until 2032 to complete). Tremendous public-works projects can take a significant amount of time--even decades--to complete. TARP is no small project. It has involved creating more than 100 miles of tunnels and mining rough holes that will eventually be large enough to hold 17.5 billion gallons of water. By the time TARP is finished, MWRD will have added an average of 323,000,000 gallons of storage capacity per year, which is an average of 885,000 gallons per day of additional storage capacity. That is impressive, not unreasonable.

Several portions of TARP will be completed long before 2029. Specifically, the Thornton Composite Reservoir must be completed and operational by December 31, 2015. It will add 4,800,000,000 gallons of waste-water storage capacity. By December 31, 2017, Stage One of the McCook Reservoir must be operational. It will add 3,500,000,000 gallons of storage

capacity. Thus, within four years, MWRD will have added 8.3 billion gallons of storage capacity. Intervenors do not seem to be objecting to the amount of time it will take to complete the Thornton Composite Reservoir or Stage One of the McCook Reservoir, i.e., the first 8,300,000,000 gallons of storage capacity.

Instead, the Alliance Group objects to the amount of time it will take until the final 6,500,000,000 gallons of storage capacity (i.e., Stage Two of McCook) is operational. The Alliance Group's main complaint on this front is that it believes MWRD could mine the rough hole at McCook faster were it not for a mining contract with a commercial mining company (Vulcan Construction Materials, LP ("Vulcan")) that, in intervenors' words, "puts the pace of construction subject to Vulcan's whims and the vagaries of the market for rock." (Alliance Group brief at 34).

The contract about which intervenors complain is between MWRD and Vulcan. Vulcan owns a quarry nearly adjacent (it is separated by a river and an interstate highway) to the McCook Reservoir. Vulcan transports rock from McCook to its nearby quarry via conveyor belt. Under the terms of the contract, Vulcan mines limestone from the land owned by MWRD, and MWRD pays Vulcan the difference between what it costs Vulcan to mine at its own quarry and what it costs to mine at McCook. Vulcan sells the mined limestone and pays MWRD a royalty of 4%.

The Alliance Group believes that Vulcan is taking too long to mine at McCook. As intervenors point out, between March 2008 (when Vulcan began mining at McCook) and April 2012, Vulcan mined at a pace of 380,000 tons per month. At that pace, it would take until 2033 to complete the mining at McCook. The slower pace is not surprising: those years were marked

by a housing and construction bust that decreased the demand for limestone. Still, even if the mining took until 2033, that length of time is not inherently unreasonable, considering the vast quantity of limestone to be mined.

The Alliance Group believes the limestone could be mined more quickly, if MWRD waived the 4% royalty fee or sold the limestone at a discount. Neither of these options is in the public interest. The public, remember, is interested in getting this project done economically. Intervenors do not say how much their alternative solutions would cost. Nor have they shown the Court that reducing the price of limestone would cause an increase in the rate of mining. According to the governments' expert, the demand for limestone is inelastic. The cost of the limestone itself is a small portion of the cost to the limestone's end user, who must also pay the costs of labor and transportation (which are more expensive). Those facts, combined with the difficulty of storing the mined limestone, means that end users buy the limestone when they need it; end users do not purchase extra limestone when it is discounted and then store it for later. Discounting the limestone (or waiving the royalty) would serve only to make TARP more expensive, which is not in the public interest.

The Alliance Group argues that the consent decree should not be entered until the governments have considered other means to mine McCook more quickly. The governments considered and rightly rejected other alternatives, such as paying someone to remove the limestone more quickly and then either storing it or dumping it in a landfill. When they received public comments making these suggestions, the governments determined that doing so would require either: (a) making a very expensive 35-foot-high pile of limestone at a storage facility that would cover an area the equivalent of the area of Chicago from the lakefront to the South

Branch of the Chicago River and from Roosevelt Road to the Chicago River; or (b) throwing away \$1,000,000,000.00 worth of limestone. These alternatives are not reasonable. What is reasonable is MWRD's decision to use Vulcan to mine the McCook Reservoir.

Related to the Vulcan contract and the pace of excavation, the Alliance Group also takes issue with the portion of the consent decree that sets out a process for dealing with mining delays, which the consent decree calls "contingency events." Under the consent decree, contingency events are mining delays beyond the control of MWRD that cause MWRD to miss the excavation deadlines set out in the consent decree. The consent decree sets out a process, whereby the MWRD, when faced with a contingency event, can consult EPA, which has the power to extend the deadlines. The Alliance Group believes this clause makes all of the deadlines illusory, but the Court disagrees. All the contingency event provision means is that the MWRD will not be held accountable for things that are outside of its control. That is reasonable. Punishing someone for something out of his/her control has no deterrent effect.

### **End-of-pipe solutions**

Another problem that intervenors have with the consent decree is that it does not require MWRD to build treatment plants at CSO outfalls. Intervenors call such plants "end-of-pipe" technologies. According to intervenors, MWRD's service area includes 372 CSO outfalls. (Of course, only 37 CSO outfalls are at issue in this case, and only those 37 CSO outfalls are relevant to the Court's consideration of the reasonableness of the consent decree.) Intervenors point out that MWRD conducted a survey of 170 of its CSO outfalls and determined that sufficient land was available to build treatment plants at 105 of those CSO outfalls. Intervenors believe MWRD

should be required to build treatment plants at those CSO outfalls so that, in times of excess rain, the CSOs can be treated at those end-of-pipe treatment plants before being released.

Once again, intervenors do not say how much this would cost or how it would be paid for. The plaintiffs say it would cost \$966,000,000.00. At any price, these end-of-pipe treatments strike the Court as fiscally irresponsible. In essence, the end-of-pipe treatments would duplicate the TARP system's task, which is to allow the treatment of all waste water before it is released. Suppose MWRD built water reclamation plants at each of the 105 CSO outfalls with respect to which intervenors say enough land exists for such plants. Once the relevant TARP reservoirs are available for storage, many (if not all) of the end-of-pipe treatment plants would be obsolete. The waste water would be captured, diverted and stored before it ever reached the CSO outfalls. All the money MWRD would have spent acquiring land and building treatment plants at the CSO outfalls would have been wasted. What makes far more sense is for MWRD to wait until TARP is completed and then determine whether there are CSO outfalls that still have CSOs. At that point, it would be reasonable for MWRD to consider end-of-pipe treatment plants at those CSO outfalls that still suffer CSOs. It would be a waste of resources to do so now.

The fact that the consent decree does not require MWRD to build end-of-pipe treatment plants now does not render the consent decree unreasonable.

## **Efficacy**

Next, the intervenors object to the consent decree on the grounds that CSOs may still occur after TARP is completed and operational. They argue that CSOs will continue both

because TARP is too small to avoid all CSOs in the future and because "transient events" will cause CSOs in the future.

In support of their argument, intervenors point to studies that suggest TARP is too small to prevent all CSOs in the future. Intervenors point to a study, conducted by the Army Corps of Engineers in 1986, that suggests reversals to Lake Michigan will occur about once per decade even after TARP is completed. According to the Alliance Group, the Corps concluded that even after the completion of the McCook Reservoir, the Chicago area would continue to experience rain storms of a magnitude that would threaten flooding and require reversals into Lake Michigan. According to the study, such reversals would occur every 8-9 years at one location and every 12-13 years at another location. Compared to the current average rate of one reversal into Lake Michigan per year, the rate after TARP is completed strikes this Court as quite an improvement.

Intervenors also point to a study conducted in 2009 by the MWRD. In the study, MWRD modeled the rainfall that occurred in the year 2006 to see if a fully-functioning TARP could have handled the waste-water load. Although MWRD found that TARP could have handled the 2006 flow, the Alliance Group complains (oxymoronically) that the 2006 flow was "uncharacteristically moderate." In other words, some years might bring more rain to the Chicago area than it experienced in 2006. The Alliance Group's point (and it is a valid one) is that MWRD cannot show, today, that TARP will prevent CSOs in every future year. Of course it cannot. MWRD cannot predict future weather patterns or the size of every future rain storm, and one cannot know with certainty how TARP will perform until it is finished.

Intervenors also point out that certain "hydraulic" events (which the consent decree calls "transient events") will occur and that those events will cause CSOs. In a nutshell, the waste water reaches the deep tunnels of TARP by falling through drop shafts. Sometimes, the force at which the waste water falls is so strong that it can damage the TARP tunnels. When that happens, MWRD closes the relevant sluice gate (to prevent waste water from flowing into the deep tunnel). The closing of the sluice gate can result in a CSO (depending on the quantity of flow). The consent decree explicitly allows MWRD to "close the minimum number of sluice gates necessary in the exercise of reasonable judgment by a trained operator in possession of the information available to the MWRD operator at the time to avoid or minimize Transient Events." (Consent Decree at 25, 27). If a CSO results, MWRD must report it to EPA and IEPA.

To the intervenors point, the Court agrees that the completion of TARP and the entry of the consent decree will not stop all future CSOs. While the Court appreciates intervenors' concerns that TARP may not have sufficient capacity for every future rain storm and that transient events will likely cause future CSOs, the Court does not think those facts make the consent decree unreasonable. Intervenors' argument rests on a fundamental fallacy, which is that all CSOs violate the Clean Water Act. That is not correct. Discharges *without* a permit violate the Clean Water Act. CSOs that comply with a permit do not violate the Clean Water Act.

<sup>&</sup>lt;sup>3</sup>The consent decree defines a transient event as "a pressure differential in a TARP tunnel that necessitates closure or partial closure of one or more sluice gates prior to TARP reaching full capacity, in order to prevent harm to people, property, or MWRD facilities. Transient Events can result from uneven filling, significant hydraulic head differential, wave action, valve closures or openings, backflow, water dams or water hammer, and variations in tunnel geometry, including without limitation a bifurcation, variation in diameter or tunnel end." (Consent Decree at 12).

Furthermore, a consent decree, in order to be entered, need not be perfect. It must be reasonable. In developing a long term plan to control CSOs, a reasonable person must make tradeoffs between price and time on the one hand and water storage capacity on the other.

Reasonableness does not require sufficient capacity to prevent CSOs every year or even in 99 years out of 100. A lower threshold is reasonable. Nor is it reasonable to require MWRD to keep sluice gates open during transient events. The reason the consent decree allows the sluice gates to close is to prevent harm to people or property. Taxpayers have already spent more than \$3,000,000,000.00 on TARP, and their interests would not be well-served by allowing transient events to damage TARP's components.

Finally, the Court takes great comfort in knowing that the consent decree requires MWRD to monitor TARP's performance once it is complete. If, upon completion, the TARP system has not brought MWRD into compliance with the three permits at issue in this case, MWRD must analyze alternatives for bringing its system into compliance, select among them and schedule their implementation.

## Performance evaluation and monitoring plan

Intervenors believe the consent decree contains inadequate provisions with respect to the manner in which TARP's performance will be evaluated and monitored after its completion.

The parties agree that the CSO Control Policy requires long-term CSO control plans to include post-construction monitoring plans. Specifically, the CSO Control Policy states, in relevant part:

The selected CSO controls should include a post-construction water quality monitoring program adequate to verify compliance with water quality standards and protection of designated uses as well as to ascertain the effectiveness of CSO controls. This water quality compliance monitoring program should include a

plan to be approved by the NPDES authority that details the monitoring protocols to be followed, including the necessary effluent and ambient monitoring and, where appropriate, other monitoring protocols such as biological assessments, whole effluent toxicity testing, and sediment sampling.

(CSO Control Policy II.C.9, 59 Fed.Reg. 18694) (emphasis added).

The NRDC Group takes issue with the fact that the monitoring plans themselves are not set out in the consent decree. Instead, the consent decree sets deadlines for when the monitoring plans must be submitted to EPA and IEPA for their approval. For example, MWRD must submit its proposed monitoring plan for the Calumet system (that leads to Thornton Composite Reservoir) within one year and the proposed monitoring plan for the Mainstream/Lower Des Plaines system (that leads to the McCook Reservoir) within five years. The consent decree also sets out certain components that must be a part of each monitoring plan. For example, the consent decree states that each monitoring plan must evaluate the water quality both at CSO outfalls and in stream and must also be sufficient to determine whether the CSOs are in compliance with the NPDES permits in effect at the time. Given that the monitoring plans cannot be put into effect until the relevant reservoirs are complete and operational, the Court concludes that it is reasonable for the parties to work out the details of the monitoring plans after the consent decree is entered. Nor is it unreasonable that the monitoring plans will test compliance with the permits in existence at the time the monitoring plan is implemented (as opposed to the permits that are in existence now, as intervenors seem to prefer). This is merely a realistic nod to the Clean Water Act, which requires compliance with permits in effect at any given moment, not compliance with permits that were previously (but are no longer) in effect.

The NRDC Group also complains that the consent decree allows itself to be terminated before the TARP systems are in compliance with the then-existing permits. As the NRDC

Group points out, ¶ 36 sets out steps MWRD must take if, during post-construction monitoring, it is determined that MWRD is failing to comply with the Calumet, Stickney or North Side NPDES permits. Those steps include planning and scheduling additional measures MWRD will take to bring itself into compliance, but the consent decree does not explicitly require MWRD to complete the additional measures. Nonetheless, the consent decree requires MWRD to comply with the NPDES permits before the consent decree may be terminated. Specifically, termination of the consent decree requires "satisfactory compliance with Section VIII" (which includes ¶ 34) of the consent decree for a period of one year. (Consent Decree at ¶ 94(b), 95(b)). Paragraph 34, in turn, provides that once the Calumet system and the Mainstream/Lower Des Plaines system are operational, the CSOs must comply with the Calumet, North Side or Stickney NPDES permits in effect at the time. Thus, before the consent decree may be terminated. MWRD must achieve "satisfactory compliance" with the permits for a period of one year. The Court reads "satisfactory compliance" to mean compliance to the Court's satisfaction. Accordingly, the consent decree cannot be terminated until MWRD has complied (to the Court's satisfaction) with the NPDES permits for a period of one year. That is reasonable.

Finally, in their brief, the NRDC group argues that the performance criteria set out in the consent decree is insufficient, because it fails to comply with an EPA interoffice memorandum. Specifically, the NRDC group argues that the consent decree should be rejected by the Court, because the consent decree sets out what NRDC describes as "qualitative" criteria for evaluating TARP despite the fact that a 2003 EPA interoffice memorandum suggested that consent decrees include "quantified performance criteria." The Court rejects this argument. Putting aside the fact that the Court disagrees with intervenors' characterization of the criteria as "qualitative," the

Court finds this argument unpersuasive. An interoffice memorandum is not a statute; it lacks the force of law. The Court will not judge the consent decree by whether it complies with an EPA memo.

The consent decree is not rendered unreasonable by the provisions for evaluating and monitoring TARP's performance once it is completed.

### **Floatables**

In the meantime, the consent decree requires MWRD to take certain actions--including controlling floatables--to ameliorate the effects of CSOs. The intervenors (particularly the Alliance Group) take issue with the floatables control plan, which they view as inadequate.

While acknowledging that the consent decree requires skimmer boats to capture floatables year-round (as opposed to half the year, as the MWRD is currently doing), the intervenors object because the boats are not required to capture floatables during periods of fog, ice and limited visibility. This objection lacks merit. It is not reasonable to send out boats when it is dangerous to do so. One would be a poor steward of public resources to send out a boat when the boat is likely to become damaged and, therefore, unavailable for future use.

Intervenors also believe that requiring MWRD to purchase two skimmer boats is insufficient. On this front, intervenors point to an EPA analysis which suggested that the MWRD needs three boats in order to capture floatables adequately during one daytime shift. Accordingly, intervenors believe the plaintiffs should have insisted that MWRD purchase three skimmer boats, rather than two. The consent decree, though, is a product of negotiation, and one cannot expect to get everything one wants during a negotiation. In any case, the consent decree

requires the MWRD to have *all* of its available boats, not just the two skimmer boats, available to respond to CSOs.

In short, the floatables plan, far from rendering the consent decree unreasonable, is a reasonable means of ameliorating floatables released during CSOs.

### **Green infrastructure**

The Alliance Group objects to the consent decree on the grounds that it does not address the quantity of water flowing into the sewer system. The Alliance Group does not say what it would like the parties to do on this front, but the Court notes that the criticism is false. The consent decree does, in fact, require MWRD to take action to limit the amount of water flowing into the sewers after a rain event. Specifically, the consent decree requires what the parties call "green infrastructure" programs, i.e., programs that will, as they are implemented, capture or absorb water during storms to prevent the water from flowing immediately into the storm sewers. In all, the green infrastructure plan requires MWRD to implement projects that retain nearly 11,000,000 gallons of water.

The NRDC Group objects to the green infrastructure plan as "meager." They call it "a drop in the bucket," which is a fair analogy (although "a drop in the half-gallon jug" might be more accurate), considering that TARP itself will hold 17,450,000,000 gallons. That the green infrastructure program is small, however, does not make it unreasonable. The green infrastructure projects are not mandated as part of the TARP plan and are not required by any law. The green infrastructure plan is icing on the TARP cake, a bonus.

The intervenors have not convinced the Court that the inclusion of the green infrastructure plan renders the consent decree unreasonable.

Case: 1:11-cv-08859 Document #: 121 Filed: 01/06/14 Page 32 of 32 PageID #:<pageID>

Hard bargain

Finally, intervenors argue that the Court should reject the consent decree, because it was

not the result of a "hard bargain." The Court judges a consent decree not by the length or

difficulty of the negotiations but by the reasonableness of the resulting agreement. For all the

reasons set forth above, the Court concludes that the proposed consent decree is reasonable.

IV. **Conclusion** 

Because it is reasonable, fair and adequate, the Court approves the consent decree and

grants the motion for entry of the consent decree.

ENTER:

George M. Marovich

United States District Judge

Longe M. marokach

DATED: January 6, 2014

-32-